

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
8 April 2004 (08.04.2004)

PCT

(10) International Publication Number
WO 2004/028521 A3

(51) International Patent Classification⁷: **A61K 31/135**,
38/21, A61P 25/00

13a, CH-4123 Allschwil (CH). **GLUE, Paul, William**
[NZ/US]; 13 Allen's Corner Road, Flemington, NJ 08822
(US).

(21) International Application Number:
PCT/EP2003/010579

(74) Agent: **GRUBB, Philip**; Novartis AG, Corporate Intellectual
Property, CH-4002 Basel (CH).

(22) International Filing Date:
23 September 2003 (23.09.2003)

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,
CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE,
GH, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LT, LU, LV, MA, MD, MK, MN, MX, NI, NO, NZ,
OM, PG, PH, PL, PT, RO, RU, SC, SE, SG, SK, SY, TJ,
TM, TN, TR, TT, UA, US, UZ, VC, VN, YU, ZA, ZW.

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/413,172 24 September 2002 (24.09.2002) US
60/485,132 7 July 2003 (07.07.2003) US

(84) Designated States (*regional*): Eurasian patent (AM, AZ,
BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE,
BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU,
IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR).

(71) Applicant (*for all designated States except AT, US*): **NO-
VARTIS AG** [CH/CH]; Lichtstrasse 35, CH-4056 Basel
(CH).

Published:
— with international search report

(71) Applicant (*for AT only*): **NOVARTIS PHARMA GMBH**
[AT/AT]; Brunner Strasse 59, A-1230 Vienna (AT).

(88) Date of publication of the international search report:
27 May 2004

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **FOSTER, Carolyn**,
Ann [AT/AT]; Auhofstrasse 129/12, A-1130 Wien (AT).
HIESTAND, Peter, C. [CH/CH]; Schönenbuchstrasse

*For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.*

(54) Title: SPHINGOSINE-1-PHOSPHATE RECEPTOR AGONISTS IN THE TREATMENT OF DEMYELINATING DISOR-
DERS

(57) Abstract: Disclosed are pharmaceutical combinations comprising at least one S1P receptor agonist, as well as a method for
treating demyelinating diseases, e.g. multiple sclerosis or disorders associated therewith or Guillain-Barré syndrome, comprising
co-administration, e.g. concomitantly or in sequence, of a therapeutically effective amount of a) an S1P receptor agonist, and b) at
least one co-agent shown to have clinical activity against at least one symptom of a demyelinating disease.



WO 2004/028521 A3